

An
 Inaugural Dissertation
 on
"Cholera Infantum"
 for the Degree of M. D.
 Submitted to the Examination
 of the Medical Faculty
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The diseases of children form one of the most important class of maladies. - They are not only numerous, but generally altogether distinct in their nature and appearance from those diseases which affect persons of matured age. -

They are moreover unquestionably more perplexing to the practitioner than the disease of adults. - I have selected one of the complaints incident to infancy, for the subject of my Inaugural Dissertation. -
 - "The Cholera Infantum" a disease which is rapid in its progress, and of extreme fatal tendency! - As it cannot be presumed that a person of my age - one who is just entering upon the arduous duties of the medical Profession, has much, or indeed anything new to communicate of a practical nature. - It will I hope not be expected that I should give much more than what I find in books on this subject & what I have learned from the valuable Lectures of Professor Chapman. -

4

"Cholera Infantum".

The disease which has received the name of "Cholera Infantum" is characterised by the following symptoms - copious discharges both upwards and downwards, with pain, gripings, and shading - The late "Dr Rush" has given us so full and perfect a description of this disease that it were needless to attempt one myself - I shall therefore give the Doctors account of the appearances of this disease in his own words -

"It affects children from the first or second week after their birth, till they are two years old - It sometimes begins with a Diarrhoea which continues for several days without any other symptoms of ^{In} disposition - but it more frequently comes on with a violent vomiting and purging and a high fever - The matter discharged,

6
from the stomach is generally yellow or green,
but the stools are sometimes slimy and bloody,
without any tincture of bile - In some instan-
ces they are nearly as limpid as water -

Worms are frequently discharged in each kind
of the stools that have been described - The
children in this stage of the disease appear
to suffer a good deal of pain - They draw
up their feet, and are never easy in one
posture - The pulse is quick and weak,
the head is unequally warm, while the
extremities retain their natural heat, or
incline to be cold - The fever is of the
remitting kind, and discovers violent
exacerbations especially in the evenings -

The disease affects the head so much,
as in some instances to produce symp-
toms not only of delirium, but of mania
inasmuch that the children throw their
heads backwards and forwards, and
sometimes make attempts to scratch,

8

and to bite their parents - nurses - and even themselves - A swelling frequently occurs in the abdomen, and in the face and limbs - An intense thirst attends every stage of the disease -

The eyes appear languid and hollow, and the children generally sleep with them half closed - Such is the insensibility of the system in some instances of this disease, that flies have been seen to alight upon the eyes when open without exciting a motion in the eyelids to remove them - Sometimes the vomiting continues without the purging, but more generally ^{the purging} continues without the vomiting throughout the whole course of the disease - The stools are extremely foetid, but in some instances they are without smell, and resemble sinks, and aliments which have been taken into the body - The disease is sometimes fatal in a few days - I once saw it carry off

a child in twenty four hours - Its duration is varied by the season of the year, and by the changes in the temperature of the weather. A cool day frequently abates its violence, and disposes it to a favourable termination. It often continues with occasional variations for six weeks or two months. Where the disease has been of long continuance, the approach of death is gradual, and attended by a number of distressing symptoms - An emaciation of the body, to such a degree, as that the bones come through the skin, livid spots, a singultus, convulsions, a strongly marked Hippocratic countenance, and a sore mouth, generally precede the fatal termination of this disease. Few children ever recover after the last symptoms which have been mentioned make their appearance. The Cholera Infantum generally makes its

appearance in the summer months, commencing in July and continuing untill the cold weather sets in - It appears to be a disease peculiar to the United States, inasmuch as we do not find it described in any European work - In cities and towns it is much more prevalent than in the country, and hence we trace its connection with those impure states of atmosphere which are always present in the warm months in ^{populous} populous cities - ✓

The opinion which is entertained by some that it arises from irregularities in diet and especially from the use of unripe fruit would seem erroneous, when we take into consideration, the facts of its less frequent appearance in the country, where children have ready access to all kinds of unripe fruit, and of its appearance only at a particular season of the year - For it certainly cannot

be supposed that irregularities in diet, are ¹⁴
only committed during those months of the
year in which this disease generally prevails -
There must be something in the state of the atmos-
-phere, in the summer months, which predis-
-poses to gastric affections - It is not a mere
local disease of the prima viae - the system
I take it, is generally affected throughout -
The disease falling upon those parts which have
acquired a predisposition, either from some
hidden cause floating in the atmosphere or from
irregularities in diet.

The cholera although primarily a gastric
affection is soon extended sympathetically to
the hepatic system -

The Predisposing causes are - a heated
and impure atmosphere - and the Exciting
causes are - whatever deranges the primæ viæ
as irregularities in diet and clothing expo-
sure to cold when the body is previously
heated - It is aggravated when it occurs

During dentition -

Of the Treatment.

The Indication is 1st To evacuate the alimentary canal and 2^d to allay pain, and irritation and determine to the surface -

As it always commences with a derangement of the alimentary canal, our first views should be directed towards it -

As regards Emetics - they can often be dispensed with, as nature very often rids the stomach of its contents without the aid of artificial means - But in some violent cases, it becomes necessary to use them, and in this case Ipecacuanha is generally preferred - In the country it is not often necessary to recur to Emetics -

Purgatives - can never be dispensed with but there is some difference as to the choice of them - The Stomach being often

/a/ Where blood is mixed with the feces, as
happens occasionally the baston perhaps would
be preferable -

/e/ It being retained when all others were
rejected -

extremely irritable, those should be selected which are least offensive - Calomel - often answers extremely well from its being insipid - and can be given in a small bulk - which is of no small consequence - Castor Oil is often substituted for the Calomel - but it is more apt to be rejected - and is not sufficiently active - (a)

Dr. Chapman has often used it with advantage - a solution of Epsom Salts (c) he thinks has a tendency to allay the irritation of the Stomach - But where the irritation is so violent, that no medicine can be retained we should promptly endeavour to allay irritation by anodyne injections - or a suppository of Opium - and the vesicating applications - But if the vomiting is violent with pain of the abdomen - hot skin and much thirst - no remedy can be superior to the Lancing - Dr. Chapman's opinion is - that many lives are lost from the timid use of the Lancing - And is he not warranted in

expressing himself thus, when dissections often reveal to us traces of previous inflammation? As the disease appears in the cavity of scabum requiring the lancet, it appears in a much milder form and is scabum fatal.

It will be found that after T. S. - ~~or~~ the Stomach will be found to retain Medicine, and Calomel should be again exhibited, if it be rejected a small quantity of Opium may be added -

The irritation being allayed we should next resort to those remedies, which restore the healthy action of the Surface -

There is generally an unequal temperature. Some parts being cold to the touch others warm, and the child appears to be in a more insensible state - the Warm Bath here produces an equal temperature, and tends to rouse the patient - For this purpose Flannel should be worn next the skin -

The disease after some time, is apt to run

2. j. It is no doubt occasioned by the impure state of
the atmosphere, the body being in a weak state
and the predisposing cause still acting is sufficient
to produce scarletina! —

| k. | Such as almond-Gally-Kind- &c.

into Diarrhoea, attended with tormina, tho' this is not a very common consequence in the country. [j] The remedies here commonly consist of Astringents. [k] and to relieve the gripings, injections of melted butter, free from salt and acidity are useful - or what is better anodyne injections - For suppressing Diarrhoea the emacaceous pulp, and a variety of others are in use - Where much astringency is necessary Dr Chapman has uniformly preferred a strong infusion of the Sew-Berry root. -

Dr Physick in such cases uses an infusion of Hematoxylon. -

What I have principally seen used is the Hybaricum perf. It is a very powerful astringent. It is made into a tincture by taking a few handfuls of the flowers, and infusing them in one quart of diluted alcohol - expose to the sun for six or eight days - a teaspoonfull may be given at

The first of these is the fact that the
 system of the world is not a simple one
 but a complex one. It is a system of
 many parts, each of which is itself a
 system of many parts. This is the
 nature of the world, and it is the
 nature of the human mind. The human
 mind is a system of many parts, each
 of which is itself a system of many
 parts. This is the nature of the human
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a dose - and repeated every two or three hours - according to circumstances - I have seldom seen it fail in checking diarrhoea - The *Geranium maculatum* is also a very useful astringent, and much used by country practitioners - Where the disease occurs in sitting the remedy to be depended on, and for which no other can be substituted, is a removal to the country - It is certain that the impure air of a city is a powerful obstacle to the removal, and a powerful auxiliary in aggravating this disease - It is varying from the fact, that when it appears in the country it is easily removed -

It is at this stage of the disease, that a Flannel Roller should not be neglected - This remedy was first introduced by Dr Chapman - It should be applied round the abdomen, and of a moderate tightness - it imparts tone to the alimentary canal and keeps up an equilibrium of temperature -

26

Prophylactic Treatment.

After the disease is removed, we should guard against a relapse - 1st By a proper Diet - The child should subsist principally on farinaceous articles, and where Milk enters as a principal ingredient -

I have known an Infant to subsist exclusively upon Milk and Barley water two weeks, having been previously much debilitated from refusing the Mothers breast, and from diarrhoea mixed with blood -

2^d Excess in eating and drinking should be carefully avoided. -

3^d Flannel should be worn next the Skin. -

4th Cleanliness should be observed, as it tends much to the comfort of the patient. -

Phosphorus Pentoxide

Phosphorus pentoxide is a white, crystalline solid, which is very hygroscopic. It is formed by the combustion of phosphorus in oxygen, and is used in the manufacture of phosphoric acid, and in the preparation of various salts. It is also used in the treatment of certain diseases, and in the preparation of certain dyes and pigments.

The following are some of the properties of phosphorus pentoxide:

- 1. It is a white, crystalline solid.
- 2. It is very hygroscopic.
- 3. It is formed by the combustion of phosphorus in oxygen.
- 4. It is used in the manufacture of phosphoric acid.
- 5. It is used in the preparation of various salts.
- 6. It is also used in the treatment of certain diseases.
- 7. It is used in the preparation of certain dyes and pigments.

Thus Gentlemen I have given a short
 account of the Symptoms - Character - and Cure
 of "Cholera Infantum" - That it is an imperfect
 one I am very sensible of - Hoping however
 that it may be deemed sufficient for the task
 imposed on me in receiving the honors of the
 University, I respectfully Submit it, "with
 all its imperfections on its head," to the
 ordeal that awaits it. —

